

Generalized Reduced Order Model Generation, Phase II

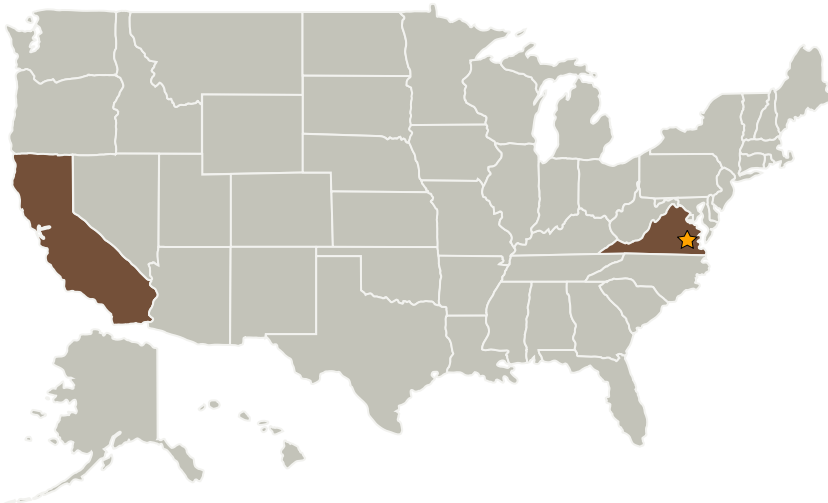
Completed Technology Project (2009 - 2011)



Project Introduction

M4 Engineering proposes to develop a generalized reduced order model generation method. This method will allow for creation of reduced order aeroservoelastic state space models that can be interpolated across a range of flight conditions. This development will be a significant advance to the process of control law development, especially in the design of control systems required to provide flutter suppression, gust load alleviation, and ride quality enhancement. The proposed technique will be an excellent compliment to modern linear and nonlinear aeroservoelastic analysis methods.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ Langley Research Center(LaRC)	Lead Organization	NASA Center	Hampton, Virginia
M4 Engineering, Inc.	Supporting Organization	Industry Women-Owned Small Business (WOSB)	Long Beach, California



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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Langley Research Center (LaRC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Primary U.S. Work Locations

California

Virginia

Project Transitions



March 2009: Project Start



March 2011: Closed out

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX12 Materials, Structures, Mechanical Systems, and Manufacturing
 - └ TX12.3 Mechanical Systems
 - └ TX12.3.3 Design and Analysis Tools and Methods